NEW SUBSPECIES AND ABERRATIONS OF BRITISH MACRO-LEPIDOPTERA.

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Cerura bicuspis, Borkh., ab. insignis.

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The dark median band is absent, but the thin black ante- and post-median lines, which demarcate the median area, are present. The subapical blotch is very pale grey.

Type: Male. Tilgate Forest, Sussex. Bred vi.1936 by W. H. Head, ex J. Hope coll. There is a figure of this beautiful aberration in Barrett's British Lepidoptera, vol. iii, pl. 101, fig. 1. It came from Tilgate Forest, and was in the collection of A. Robinson.

Pterostoma palpina, L., ab. fasciata.

The postmedian line on the forewing forms a dark brown fascia; the basal and median parts of the hindwings are much darker than usual, but there is a pale marginal band, broad and well defined, where the wing in a normal moth is darkest. On the underside of both wings the basal and median parts are unusually dark and the marginal area is light coloured.

Type: Male. Locality unknown. Ex Stevens, Vauncey Harpur Crewe, and Gilles collections.

Clostera pigra, ab. alba.

The wings, thorax, abdomen, and all other parts are white and without markings.

Type: Female. Locality unknown. Bred by William Dawes, ex Horne coll.

Tethea (Palimpsestis) ocularis, L., ab. fusca.

The forewings, hindwings, and thorax are much darker and more fuscous than those of the typical form and lack the pinkish hue; the darker colour makes the reniform and orbicular stigmata and the pale band on the hindwings more conspicuous.

Type: Male. Tooting, London, S.W. Bred 26.iv.1932, E. A. Cockayne. This appears to be the only form found in the London area, but I have not seen it from other parts of England or from the Continent.

Eriogaster lanestris, L., ab. obsoleta.

On the forewings the postmedian line is faintly visible near the costa, but even here it is narrow and pale reddish brown; elsewhere it is absent. At the base the usual white mark is only indicated by a few pale reddish-brown scales. The hindwing is concolorous.

Type: Female. Oxford, N. P. Fox.

This corresponds with ab. obsoleta, Tutt, in Lasiocampa quercus and L. trifolii.

Amathes xanthographa, F., ab. alba.

The forewings, hindwings, thorax, abdomen, and all other parts are white and without markings.

Type: Male. Bedford Purlieus, 8.viii.1902, ex Vipan coll.

Lampra fimbriata, Schreb. (Triphaena fimbria, L.), ab. inornata.

The forewings vary from ochreous brown to dull reddish brown in colour. The dark markings are indistinct and the usual pale lines are almost as dark as the ground colour, so that the wings appear to be nearly unicolorous.

Type: Male. Wimbledon. Bred 1898 by E. H. Taylor.

Paratypes: Three males and a female with the same data and a male. Monks Wood, Hunts, 4.vii.1905.

Mamestra brassicae, L., ab. concolor.

On the forewing the usual dark markings are present, but the subterminal line, the reniform stigma and the line around it, and all the paler areas present in a normal moth are brown like the ground colour. The basal part of the hindwing is darker than usual and the white mark at the anal angle is absent. The brown has a slight coppery gloss.

Type: Male. Burnley, 1921, W. G. Clutten.

Allotype: Female. Clapham, London, S.W., A. T. Stiff. Gregson says he has a similar specimen (Entomologist, 1868-69, 4, 52) and there is another in the Rothschild collection at Tring. The form is different from ab. scotochroma, Röber (Iris, 1884, 1, 340, pl. 13), which has a thin white subterminal line and white scales at the reniform and from ab. unicolor, Tutt, which is black with a white reniform.

Hadena thalassina, Rott., ab. pallida.

The usual blackish brown markings of the forewings are pale brown and thorax, hindwings and abdomen are much paler than usual. This gives it a unicolorous appearance.

Type: Female. Leigh, Surrey, 18.vi.1912, A. T. Stiff.

Hadena (Dianthoecia) cucubali, Fuessl., ab. pallida.

All the dark markings of the forewings are replaced by markings of a soft light brown colour, but a pink flush is present. The hindwings and abdomen are very pale brown, and the thorax is almost white.

Type: Male. Enniskillen, Fermanagh, Ireland, 2.vi.1896, ex C. F. Johnson coll. This lovely aberration is in perfect condition and was probably bred.

Heliophobus saponariae, Esp. (reticulata, Vill.) ssp. marginosa, Haw.

English specimens vary very little, but the ground colour of both forewings and hindwings is straw-coloured and the markings have a yellowish tint. They are easily distinguishable from any other European or from Asiatic specimens, all of which are fuscous with a white or pinkish ground colour. Haworth (Lep. Brit., 1809, 195, No. 101) named the species marginosa from two Yorkshire examples, and though his description is inadequate it must refer to the English form. Tutt in his British Noctuae makes a passing reference to marginosa, but does not appear to have noticed the constant difference between the English and all other forms. Marginosa seems to me to be a good subspecies.

Heliophobus saponariae, Esp., ssp. hibernica.

This is rather smaller than the typical form, but has the same fuscous markings, though of a darker shade. The ground colour is pink.

Type: Male. Co. Cork, Ireland, vi.1914. Bred by L. W. Newman. Allotype: Female. Co. Cork, 4.vi.1915. Bred by L. W. Newman. These Irish specimens are as dark as those from Uralsk, but have a beautiful pink ground instead of a white one. Very rarely Continental specimens have as pink a ground, but it appears to be present in all specimens from Cork and Waterford.

Celaena leucostigma ssp. scotica.

Smaller and darker than the typical form, which occurs on the Continent and in England. The length of the forewing is 15 mm. compared with 17 mm., which is the average length in English specimens.

Type: Male. Rannoch, Perthshire, 14.viii.1939, E. A. Cockayne. Allotype: Female. Rannoch, 13.viii.1939.

In this species there are three forms: the plain form, leucostigma, Hb.; the intermediate form, lunina, Haw. = intermedia, Tutt; and the variegated form with strongly contrasting light and dark markings, fibrosa, Hb. All three forms occur in ssp. scotica, but in lunina the markings are much darker, and in fibrosa not only are the markings darker and more distinct, but the light areas are paler. shades of ground colour also occur, but they are darker than the corresponding shades in English and Continental examples, and the reniform stigma may be either ochreous or white. Some Irish specimens are as dark and rich in colour as scotica, but they are as large as typical ones. Huebner's figure of fibrosa is very brilliantly coloured and there can be little doubt that the red is much too bright. It probably represents the variegated form with a bright red-brown ground. Tutt uses the name fibrosa for any variegated form, whatever its ground colour. and this seems to me to be a correct course to adopt. It is certainly not synonymous with ssp. scotica, though it is often used incorrectly for all Scottish specimens. The ssp. scotica is widely distributed, but local, and is said to occur as far north as the Shetlands. There is no Cladium, or other sedge, and no Iris in many places where it is found, but the larger rushes are plentiful. I thought these were the probable food-plant, but Major Mackworth Praed has seen females ovipositing on blue grass, Molinia coerulea, in Argyllshire, which is strong evidence that this is the usual food-plant.

Leucania impura, Hb., ssp. scotica.

Slightly smaller and as a rule without the red tint so common in English specimens. The hindwings are uniformly black, and this colour extends to the inner margin and termen.

Type: Male. Rannoch, Perthshire, 1.viii.1938, E. A. Cockayne.

Allotype: Female. Kinlochewe, Ross-shire, 2.viii.1937.

Tutt points out the difference between English and Scottish examples in his *British Noctuae*, but for some reason did not name the latter. The typical form has even lighter hindwings than the English form, ab. fuligosina, Haw., and the difference between a row of fuligosina and scotica placed side by side is most striking.

Leucania straminea, Tr., ab. ferrago.

Head, thorax, and forewings unicolorous dark reddish brown; hindwings a paler shade of the same colour.

Type: Female. Wicken Fen, Cambridgeshire, vi.1913, R. Tait.

The colour is very similar to that of a bred specimen of one of the darker reddish brown forms of $Leucania\ lithargyria$, ab. ferrago, F., or $L.\ albipuncta$.

Panemeria tenebrata, Scop., ab. nigrescens.

The yellow colour of the hindwings is replaced by blackish brown. Type: Male. Chelmsford, Essex, vi.1898, P. W. Abbott, ex Vipan coll.

SALE OF THE COLLECTION OF BRITISH LEPIDOPTERA FORMED BY THE LATE SIR BECKWITH WHITEHOUSE.

A third portion of the above collection was sold on the 21st and 22nd of February last at Messrs Glendining's Auction Rooms in Argyle Street, London. On this occasion the butterflies consisted chiefly of duplicates and minor forms and aberrations, and the following lots are selected as worthy of mention:

Euchloë cardamines, L.-A yellow-tipped &, ab. lutescens, £7 10/-. Colias croceus, Fourcy.—A purple-flushed Q, £2 4/-. There was very little purple apparent on this insect and the description was flattering. Apatura iris, L.-A & ab. iole in bred condition, £6 15/-. Limenitis camilla, L.—An ab. nigrina in bred condition, £2 2/-, was a decided bargain for the buyer. Another good example, £1 12/-. Aglais urticae, L.-An ab. nigrocaria with black hindwings, in bred condition, ex Crabtree coll., £7 2/6. A form of same on pale ground colour, £2 12/6. A good example of ab. nigrocaria, £2 14/-, and a somewhat similar specimen, £2 2/-. An aberration of same with enlarged mauve lunules, £3 15/-. Argynnis cydippe, L.—An underside aberration almost devoid of silver spots on hindwings and black blotched on forewings, £7 5/-. Argynnis selene, Schiff.—A silvery underside, W. Penn, Sussex, £4. A Q blotched with black, A. Ford, New Forest, 1935, ex Bright coll., £2 15/-. Maniola jurtina, L.-An albino & in fine condition, Warminster, ex Bright coll., £3 10/-. A golden &, Royston, 1923, Oliver, £5. An albino Q, not perfect, 28/-. Chrysophanus (Lycaena) dispar, Haw.—A large of in fine condition, ex Bond coll., £5 5/-. Polyommatus icarus, Rott.—A perfect gynandromorph equally divided in sexes, Co. Mayo, G. B. Hodgson, 1926, £5 10/-.

The collection of insects realized roughly £243. Two 20-drawer cabinets of oak, with glass tops and bottoms to drawers, realized £26 and £28 respectively, and a 40-drawer standard Brady cabinet, £40, bringing the total of the first day's sale to roughly £336. Generally prices realized throughout were more reasonable than on former occasions, and more in accordance with the pre-war standard.

At the second day's sale the Heterocera were sold and the collection included many rare and striking aberrations. The following lots are selected for reference: Rhodometra sacraria.—A \circ with pink suffusion, £6 15/-. Pairs of bred Catocala fraxini, £4 to £5 each, Catephia